### A REVISION OF THE DECISARIA GROUP OF CLEORA.

#### By LOUIS B. PROUT.

(With Plate XIII.)

CINCE I published my revision of the "alienaria group" of Cleora Curt. (Bull. Hill Mus., iii, 179-224, pls. v-vii, 1929), Janse has erected (Moths S. Afr., i. 119 [gen, caelebs] and 266, 1932) a new genus Neoclora, which he based negatively on the presence of "only one pair of pectinations on each joint" of the 3 antenna (not two pairs as in Cleora sens. str.) and positively on the "very characteristic genitalia, the typical feature of which is the two well-pronounced cornuti at the end of a tubular, wrinkled vesica." By the former criterion, my section B (l.c., pp. 182, 185, 203-220) would have to be transferred to Neoclora, and it is probable that this would give a better approximation to an accurate taxonomy. But as Janse definitely states that "all species" placed by him in his new genus have the remarkable cornuti, and this is not the case with their Indo-Australian relatives, I have decided not to make the change at present; to transfer them by cutting out the genitalic section of the diagnosis, without some alternative method of delimitation, would be almost tantamount to making the very "natural" new genus into a receptacle for numerous so-called Cleora which have not yet been critically considered from the standpoint of systematics.

In any case the purpose of the present contribution is not classificatory. It owes its inception to the discovery that the subsection of my section B which may appropriately be called the decisaria group embraces several previously unknown or undetected species; and that consequently my treatment of it was not only inadequate but in some details inaccurate. The general unity of structure, coupled with the extreme variability in the wing markings—at least in the few localities from which at that time sufficient material was accessible—blinded my eyes to the existence of two or three well-distributed species, although I did recognize the independence of some Pacific Island forms (hemiopa Prout and psychastis Meyr.) and of the interesting rhadia Prout of Luzon. The recent acquisition by the Tring Museum of splendid collections from Bali and Java, made by Mr. J. P. A. Kalis, directed my attention to some deviations which did not seem explicable on geographical grounds, and necessitated fresh investigations into the structure, particularly of the of genitalia. With the patient help of Mr. W. H. T. Tams and Mr. A. H. Stringer at the British Museum, I have at last brought the group into sufficiently good order to justify a further revision, although there will certainly be many fresh discoveries made when some of the other islands have received the attention which has now been given to Bali.

By the decisaria group I understand all the species which have the special fovea which I used in my key (l.c., p. 185)—"fovea above with a rosette of black scales"—and described more fully under displicata (p. 204) and especially decisaria (p. 205); that is to say, species 21 to 24 of my revision. My first intention was to use the group name in a still narrower sense, ignoring displicata (Walk.), with its non-dilated  $\sigma$  hindtibia and lack of raised scale-tufts on the hindwing; but I found that there was work to be done in this direction also and

that the relations were probably closer than I had supposed. In my introductory characterization of the genus I pointed out (p. 181, footnote) the taxonomic unimportance of the tibial character, and if I were rewriting my key I should transpose the divisions 3 and 4, so that all the subjects of the present survey would be brought under the one heading (3 to 6, inclusive).

Mr. Stringer, in testing the question of the transference of the group to Neocleora Janse (see above), noted that none of those examined had the two long spines at the end of the vesica, but generally 3-4 (sometimes 5 or a larger number) smaller "cornuti"; at the same time he called my attention to the more proximally placed spine or spines of the aedocagus, which may prove to have taxonomic significance: in spp. 1-3 (displicata auct. olim) there are 5 or 6 spines proximally (or perhaps in pheucta one composite spine) and a considerable number of cornuti distally; in the central section (spp. 4-11) there are 1 proximal spine (sometimes also in frigescens a second but very small one) and nearly always 3 or 4 cornuti distally; in two New Hebrides outliers (psychastis Meyr. and immemorata Walk.) there are 2 strong spines proximally; psychastis has 1 at the tip of the vesica, immemorata (new for the New Hebrides, Miss L. E. Cheesman) 2 in this position.

In dealing with already known species below, I omit a few bibliographical references which can be supplied from my former revision and cite the latter under a highly abbreviated title.

#### 1. Cleora displicata (Walk. 1860).

Prout, Revision, p. 204, pl. vi, fig. 19 (1929).

From the last letter which I received from Mr. G. M. Goldfinch before his much-to-be-regretted retirement from active entomological work, I learned that he had noticed the existence of two or three distinct Queensland species which were passing under the above name. Hoping, however, that he would follow the matter up, I had taken no steps to deal with it until recently, when a new Bali species with non-dilated hindtibia (No. 4, infra) and a renewed examination of the "? Java" 3 (No. 2, infra) forced it upon my notice.

Fortunately Walker's type, a 3 from Moreton Bay, belongs to the same species as the "Queensland" one (not exactly localized) from which Mr. Bennett made his preparation and drawing and there is little to modify in my account. The genitalia, however, are scarcely so "remarkably" distinct from some others as they then seemed to me, but the figure, in spite of some imperfections, will give a very good impression of the valve. The "occasional ab." (in markings) belongs to No. 3. Walker's original  $\mathfrak{P}$ , said to come from Sydney, probably belongs here; for his  $\mathfrak{F}$  "b," see No. 3.

#### 2. Cleora pheucta sp. n.

Smaller than displicata (32 mm.). Palpus approaching twice the length of diameter of eye.—Forewing with fovea formed much as in displicata; median area rather narrow, postmedian after the curve at the radials running inward a good deal, its inward curve between M<sup>2</sup> and the vicinity of the hindmargin rather pronounced and nearly smooth (with only a very slight tooth about the fold to break its course).—Underside also much as in displicata, the dark border on the

forewing reaching the postmedian line at costa, but on the hindwing rather narrow compared with that of most of the group.

In the genitalia distinguishable from displicata by the absence of the scobinate patch and by the dilated sacculus arm; instead of a group of spines on the aedoeagus, which characterizes both the preceding and the following, there appears to be a serrated single spine, or perhaps a cluster so compact that it has not been found possible to separate them.

Java: Mount Gedeh, a  $\circlearrowleft$  in the Tring Museum so similar to an undersized displicata that I formerly referred it there and suspected a possible error of locality. Notwithstanding the differences in the genitalia, it may yet come to be regarded as a subspecies of that species.

## 3. Cleora goldfinchi sp. n.

Hindtibia not dilated. Generally smaller than displicata (34 to 36 mm.). The darker irroration, thicker lines and in general heavy dark markings give it a distinctive appearance; in particular the well-developed longitudinal shading in front of R³, on the forewing appearing to continue the (often well-developed) median shade (compare injectaria vittata Warr.).—Forewing with antemedian not so oblique outward anteriorly as in most displicata; cell-mark rather evenly edged with blackish.—Hindwing with somewhat better traces of the long scales proximally to the cell-mark and to the postmedian than in displicata, though still much smoother-looking than in most of the decisaria group; dark median line contrasting sharply against the whitish proximal area.—Both wings beneath with the dark border generally tapering regularly from M¹.

Valve with the scobinate patch present, differently placed from that of displicata; both the arms of the sacculus shortened.

# 4. Cleora diphasia sp. n. (pl. XIII, fig. 16).

\$\delta\$, 27–32 mm.; \$\text{Q}\$, 31–36 mm. This was easily picked out from an enormous series of callicrossa from the same locality by its smaller average size, more displicata-like underside and the general impression made by the upperside; it was then noticed that the \$\delta\$ hindtibia was not or scarcely dilated, the hairpencil wanting. Less variable than callicrossa (only the roughly typical forms and those with the median area shaded with black-grey in the posterior half of the forewing or the posterior and proximal parts yet known).—Median shade of forewing passing close to (generally "hugging") the distal side of the cell-mark, never forming the wide loop which is so frequent in callicrossa; dark shading on postmedian about (and in front of) R³ on the whole more developed.—Hindwing a trifle less ample in proportion than in callicrossa, its termen on the whole less crenulate.—Underside with the borders more soberly darkened than in callicrossa (especially in the \$\delta\$), with little or no shading off to brown proximally; postmedian of forewing generally touching the dark border in parts of its anterior half (in callicrossa generally well separate).

W. Bali: Prapetagoeng, 1,500 feet, May 1935 (J. P. A. Kalis), 28 ♂♂, 12 ♀♀, in the Tring Museum. A ♀ from Sumba (W. Doherty), in the same

collection, which has hitherto been a puzzle, belongs here, possibly separable racially.

The shape and armature of the 3 valve (pl. xiii, fig. 1) confirm the distinctions, and the genitalia of the race about to be described (fig. 2) conform entirely; complex process of the sacculus modified, less irregular than in the decisaria-callicrossa assemblage, proximally evenly toothed, margin of valve only slightly hairy. Uneus slight. The aedoeagus agrees with the decisaria rather than with the displicata subsection.

C. d. refota subsp. n. Browner than the Bali race and smaller still than the great majority; the brown shade outside the postmedian rather bright, as also on the forewing that which precedes (proximally) the antemedian.

Tenimber, the type 3 ex coll. Joicey, together with  $1\ 9$ ; Portuguese Timor: Suai,  $2\ 3\ 9$  (E. Wahr) in the Tring Museum, one of each sex showing the aberration in which the posterior half of the median area is darkened with blackgrey.

#### 5. Cleora rhadia Prout 1929.

Prout, Revision, p. 204, pl. vi, fig. 20 (1929).

This and the following forms, as far as *lacteata*, are associated by the two-pronged processes of the valve (fig. 3) and seem to be all closely related. Mr. Stringer, indeed, was inclined to regard all as races of a single species; but taking into account all the characters, as well as the inferences deducible from their distribution, I consider them as two, if not three, species. Concerning typical *rhadia*, from Luzon, I have nothing fresh to record.

C. r. frigescens subsp. n. (pl. xiii, fig. 17), ♂, 31–35 mm.; ♀, 38 mm. Upper-side of a dead white, with some brown-grey irroration.——Forewing perhaps on an average slightly narrower than in rh. rhadia, proximal markings scarcely so oblique, median area generally narrower at posterior end, median line more strongly expressed.——Underside distinctive, decidedly whiter than rh. rhadia, the subterminal shades and on the hindwing the cell-spot still further reduced, sometimes almost obsolete on the hindwing (closely similar to hemiopa ecdeēs Prout 1929). Valve (fig. 4) narrower at apex than in rh. rhadia, with the pronged processes of the sacculus longer and slenderer.

W. Bali : Prapetagoeng, 1,500 feet, May 1935, 8 33, 1  $\circlearrowleft$ , showing little variation.

From W. Java I have only seen 3 3, which I cannot separate superficially from rh. frigescens, unless the brown shade outside the postmedian is a little less ill-developed, but which may represent a different race, as the genitalia of the one examined in the British Museum (Mount Gedeh, 5,000 feet, Overdijkink) shows the pronged processes less developed; the other two (Mount Gedeh, 2,000 feet; Mount Malang, 3,000 feet) were received by Lord Rothschild from Mr. Kalis. A worn of from Celebes looks as if it belonged about here, but has not been critically studied.

## 6. Cleora perbona sp. n. (pl. XIII, fig. 18).

Cleora decisaria part., Prout, Revision, pp. 205, 206, pl. vi, fig. 21 (valve) 1929) (err. det.).

3, 33-40 mm. (one dwarf 30 mm.); 4, 40-42 mm. Conceivably a remarkably differentiated race of *rhadia*, as no significant difference has yet been found in the genitalia; but so dissimilar that I suspect structural distinctions will yet be

discovered. More likely a less white subspecies of the species which I assume to be *lacteata* Warr. (see below). Abdomen relatively more elongate than in *rhadia*, with irregular dorsal spots (in some examples almost crest-like) of elongate white scales.

Forewing somewhat less narrow than in rhadia and its races, apex somewhat rounded, about as in callicrossa; in the  $\circlearrowleft$  well tinged with brown, especially beneath, in the  $\circlearrowleft$  whiter, but more or less copiously irrorated and with the brown bands which accompany the lines bright; lines more strongly dentate than in rhadia, the ante- and the postmedian line widely—generally very widely—separated at costa, the former slightly oblique inward from costa to SC, then making a strong curve outward, as in most callicrossa; median variable, at times making a wide outward loop beyond the cell-spot; cell-spot commonly with black or blackish circumscription; postmedian with the sinuosities not strong; subterminal well developed, with fairly strong dark-grey shading or maculation on each side.——Hindwing with termen rather strongly convex and appreciably more crenulate than in rhadia; the patches of raised white scales well developed, the area between median and postmedian generally whitish; coloration and markings otherwise conforming to those of forewing.

Underside at first sight remarkably like that of callicrossa, with similar brownish suffusions outside the postmedian, strong blackish cell-spots, strong median line and dark distal bands; cell-spots on the whole not quite so large, especially that of the hindwing; median line even thicker, its central bend on the hindwing generally rather more angular, its entire course on that wing inclined to be faintly crenulate; distal band less broad on both wings, but especially on the hindwing, showing the tendencies to posterior narrowing, or even obsolescence, which indicate its affinity with rhadia.

Goodenough Island, 2,500–4,000 feet, April and May 1913 (A. S. Meek), a good number, the type series in the Tring Museum. Probably also on parts of the New Guinea coast; in the Tring Museum there are no less than  $11 \text{ } \text{$\mathbb{Q}$}$  from Astrolabe Bay and district which I feel confident should be referred to perbona, but not a single  $\text{$\mathbb{G}$}$  was taken with them.

An aberration, known in one of each sex, shows much black-grey suffusion proximally to the median line (not, as in similar aberrations of *callicrossa* and *diphasia*, extending to the postmedian posteriorly).

The processes of the valve (fig. 5) are slightly less long than in *rhadia* frigescens, but otherwise similar. Unfortunately, not having a Ceram 3 available and not suspecting any confusion of closely similar species, I had the valve of a perbona figured (Revision, pl. vi, fig. 21) as decisaria.

#### 7. Cleora lacteata (Warr. 1897) (pl. XIII, fig. 20).

Chogada lacteata Warr., Nov. Zool., iv, 247 (1897) (Kinnigunang [Kinigunang], New Britain).

I think this name, which has been sunk in the synonymy of decisaria (Walk.), will have to be resuscitated for the Bismarck and Solomon Islands representative of the preceding. Very unfortunately the type, a  $\varphi$ , is the only Gazelle Peninsula specimen of the group yet known and is not quite typical, the marginal (or on the hindwing chiefly submarginal) shades beneath being less broad than usual <sup>1</sup> and

<sup>&</sup>lt;sup>1</sup> Warren's brief diagnosis, giving "thick postmedian and broad submarginal shade," is therefore more appropriate to the present species than it would have been if he had compared this particular specimen with the norm of the group.

—on account of its not very fresh condition—the brownish shading between postmedian and subterminal band is little in evidence; but a quite normal  $\delta$  of the Solomons species, taken on Feni Island (E. of New Ireland), proves its occurrence in the Bismarck Archipelago, while a side-by-side comparison with a short series of both sexes of nigristigma (see below) shows how difficult it would be to conceive of it as an aberration of this latter. For the valve of a Guadalcanar  $\delta$ , see fig. 6.

Generally speaking, *lacteata* differs chiefly from perbona in its whiter colour (though with strongly developed markings, the brown bands which accompany the lines rather bright) and especially on the underside, which has the postmedian still thicker and the borders broader, though on the hindwing still sufficiently narrowed in its posterior half to leave room for an almost continuous white terminal band from radial fold to tornus.

Solomon Islands: Guadalcanar (type  $\sigma$  in Mus. Tring), Bougainville, Treasury, Choiseul, Ysabel, Tulagi. Also a  $\sigma$  from Feni Island (see above) and the original  $\circ$  from New Britain.

# 8. Cleora decisaria (Walk. 1866) (pl. XIII, figs. 21, 22).

Boarmia decisaria Walk., List, Lep. Ins., xxxv. 1589 (1866) (Ceram). Prout, Revision, p. 205 (1929) (part.).

The troublesome fact that Walker founded this species on a  $\mathbb{Q}$  is made all the more troublesome by the further fact that it still remains the only specimen of its group which I have seen from Ceram, so that there has been no opportunity to become acquainted with the range of forms which occur there or to examine the genitalia of any topotypical  $\mathcal{J}$ . A fresh study of the type, however, has given me a certain amount of assurance as to the determination; the white underside, without the brownish suffusions of *callicrossa* and with the median line very ill-developed posteriorly, point pretty definitely to the other widely distributed species of the group, so that I feel justified in employing the old name in this sense.

Expanse 34-42 mm., in W. Bali on the whole a trifle larger than callicrossa and perhaps with the termen of the forewing slightly more oblique, just sufficiently to give it in general a slightly less stumpy appearance. In the palpus, antenna, hindleg and fovea, as well as in the scaling, not yet found to diverge from the characterization which I gave of the composite "decisaria" of my earlier revision. Even the of genitalia deviate so little that one would hesitate to make this a basis for a reclassification if there were any other way of understanding (and demonstrating) the interrelations of the distribution, both horizonal and vertical, of the two forms. The distal margin of the valve (figs. 7, 8) is appreciably broader and the whole has a squarer appearance, the patch of hairs at its apex is reduced in extent and the hairs themselves are shorter; the proximal part of the complex "sacculus" is certainly more highly developed than in some of the group, but I am not sure that it can be distinguished from every form that can occur in callicrossa, some allowance having to be made for individual variation.

Walker's type Q, which has lost its abdomen but is otherwise in passably good condition, has been very successfully photographed by Mr. Tams and its inclusion on our plate will materially add to the utility thereof. It is by no means

a striking form, but its underside shows close similarity to that of a Mount Kebea ♀ with which I carefully compared it; this, is its turn, is quite obviously the Q to a 3 (from the same locality) which has furnished one of our figures of the valve (fig. 8). The principal distinctions from callicrossa underside are that the postmedian line of the underside is slender, only well developed on the anterior part of the forewing, weak or obsolete behind (in callicrossa thick throughout, see fig. 21); the space between this line and the terminal band whiter (in callicrossa suffused with brown), on an average broader, the terminal band being on the whole less broad and less heavy, the contained white terminal spots not quite so sharply defined; the cell-spots, though often large (as in Walker's type) are less constantly so than in callicrossa, and on the upperside show (that of the hindwing particularly) a tendency to reduce the black element. Notwithstanding the variability of both, the following further details may also be often found serviceable: postmedian line of both wings, above and beneath, commonly less strongly sinuous than in callicrossa, at times also the proximal edge of the terminal band of the forewing; underside almost throughout with a whiter tone, particularly in the QQ.

? E. Java: Waterfall Baoeng, 1,200 feet, a pair; W. Bali: Mondoktoempang, 2,500 feet; E. Bali: Batoeriti, 2,500 feet, 2 ♂♂; Buru: Kayeli, 2 ♂♂; Ceram, 1 ♀ (the type); New Guinea: Mount Kebea, 6,000 feet, 1♂, 1♀.

# 9. Cleora amphidoxa sp. n. (pl. XIII, fig. 23).

 $\circlearrowleft$ , 33–36 mm.;  $\circlearrowleft$ , 36–37 mm. Face, palpus, antenna and hindleg as in decisaria and callicrossa; tibial pencil of  $\circlearrowleft$ , as in them, including a patch of fuscous or dark-grey hair. Wings in all the known examples with a slightly brownish tone, the bright brownshades fairly well expressed. —Forewing with the markings much as in well-marked decisaria, postmedian line not (as in callicrossa) deeply incurved at fold, thus never touching the median line, in the  $\circlearrowleft$  not even approaching it; cell-mark with the dark circumscription brown rather than blackish, not very strong.—Hindwing with corresponding modification of the cell-mark; postmedian line often rather markedly sinuous.—Underside with some brown suffusion recalling that of callicrossa; the markings brown, less mixed with black than in callicrossa, the postmedian weakened, more approaching that of decisaria, the cell-spot of the hindwing also small and weak.

Genitalia: 3 valve (fig. 9) not so square as that of decisaria nor with its apex so lightly clothed; seems hardly distinguishable from that of some callicrossa forms in which the proximal part of the sacculus armature is highly developed.

N. Borneo: Tenom (E. Wahr), 6  $\circlearrowleft$  2  $\circlearrowleft$  , type  $\circlearrowleft$  in the Tring Museum; Labuan (A. Everett), 1  $\circlearrowleft$ .

In most respects, including the wing-shape, strictly intermediate between the preceding and the following species, so that I do not care to attach it to either as a subspecies, though perhaps the genitalia suggest that it has the more recently branched off from callicrossa. The only noteworthy aberration yet known is one of the 33; in it the bright brown shades are extended, running longitudinally from near base to near termen on the posterior part of the fore- and the anterior part of the hindwing.

## 10. Cleora callicrossa (Meyr. 1889) (pl. XIII, fig. 19).

Boarmia callicrossa & Meyr., Tr. Ent. Soc. Lond., 1889, p. 498 (1889) <sup>1</sup> (Port Moresby). Chogada callicrossa Warr., Nov. Zool., v. 423, 430 (1898) (Key Islands). Cleora decisaria part. Prout, Revision, p. 205 (1929).

Meyrick's holotype, a 3, is a pretty and rare aberration with strong dark blue-grey (almost blackish) shades on the upperside proximally and distally to the subterminal. The species is extremely variable on the upperside, but the splendid series which have been received from the Key Islands and from Prapetagoeng, W. Bali, besides good material from Townsville, Queensland, have shown how little the underside varies and how good a criterion it furnishes in differentiating the allied forms. It is not necessary to repeat here what has been given under decisaria and amphidoxa.

The valve has been figured from a Key Island of in Ins. Samoa, iii, 161, text-fig. 2A, after a drawing by Mr. Tams; it has, however, been considered desirable to use some of his photographs here (figs. 10-13), in order not only to secure uniformity with the other illustrations, but also to show the apical patch of hair and the possibility of geographical variation.

One or two extremely interesting aberrations, previously unknown in the group, occur in the Prapetagoeng series; perhaps the most striking (represented by 3  $\circlearrowleft$  and 1  $\circlearrowleft$ ) has a large dark (brown, largely suffused with black) patch on the hindwing from R<sup>1</sup> almost to abdominal margin, proximally erossing the median line and distally reaching considerably beyond the postmedian.

### 11. Cleora nigristigma (Warr. 1905) (pl. XIII, fig. 24).

Chogada decisaria ab. nigristigma Warr., Nov. Zool., xii, 432 (1905) (Choiseul I.).

I am inclined to think the "decisaria" of the Solomon Islands a separate species rather than merely a subspecies of either of the foregoing. The apex of the valve (fig. 14) is narrower than in any of the eognate forms, the tufts of hairs on the margin eonsiderably more developed, the eomplex process of the sacculus smaller. In any case it needs a separate name.

Generally rather small, the  $\Im \Im$  and to some extent the  $\Im \Im$  suffused with a dirty brownish, the markings above generally more or less blurred, even the lines fine and not intense; cell-spots, on the other hand, often (perhaps in 20 per cent. of the known examples) strongly black even on the upperside. Underside, especially in the  $\Im \Im$ , with the dark border rather broad and considerably reducing the white terminal spots, the postmedian of the hindwing gently curved rather than bent or angled.

As regards the nomenclature, I think I am justified in here raising the "ab." name to the rank of a species, as it was not actually erected as a "nomen collectivum," is not preoccupied in the genus and happens to represent a phase

 $<sup>^{1}</sup>$  "1899" in my Revision is of course a misprint, unfortunate but not likely to have caused any misunderstanding.

which, though by no means the commonest, occurs throughout the range of this species while extremely rare elsewhere in the group.

Bougainville, Choiseul (type), Ysabel, Florida, Guadalcanar, Kulambangza

and San Christoval.

C. n. talaseënsis subsp. n. Not so small ( $\delta$ , 35-38 mm.;  $\varphi$ , 37-40 mm.), above with the markings less blurred than in n. nigristigma, otherwise essentially similar.

New Britain: Talasea, January and February 1928 (A. F. Eichhorn), 6  $\circlearrowleft \circlearrowleft$ , 2  $\circlearrowleft \circlearrowleft$  in Mus. Tring; for the sake of uniformity, I have selected as holotype the one example  $(\circlearrowleft)$  of the black-spotted form.

# 12. Cleora ictuibasis sp. n. (pl. XIII, fig. 25).

♂, 34–38 mm.; ♀, 40 mm.

Divergent from all the preceding in the entire absence of dark terminal bands beneath; also in some details of the fovea, which, however, is sufficiently similar to justify its inclusion in the group. Easily picked out among the innumerable concentraria (Snell.) forms of the district in which it occurs by its more uniform, greyish tone (caused by the rather profuse distribution of dark irroration and comparative obsolescence of the reddish-brown bands of shading), much less bulged postmedian of the forewing, black mark at base of abdominal margin of hindwing (a trifle larger than in most of the decisaria group) and essentially different underside, which, though much less deeply than above, is also uniformly irrorated and shows (rather weakly) the principal markings of the upperside; cell-spot, especially of hindwing, generally narrowed. Hindtibia of  $\delta$  with strong hair-pencil, tarsus slightly shorter than in decisaria.

Forewing slightly narrower than in decisaria; the large, composite fovea characteristic, occupying almost the whole proximal area between M and SM², its principal part bisected by the fold but in its totality somewhat lyre-shaped, scaled above much as in decisaria, but without the differentiated "rosette."—
Hindwing above in both sexes with the patches of long white or white-grey scales

as in decisaria.

The 3 valve (fig. 15), figured from a photograph kindly prepared by Mr. Tams, shows a stronger tooth near the base of the costa than in any of the decisaria group (sens. str.) and very noticeable differences in the armature ("sacculus" and "harpe").

E. Java (J. P. A. Kalis): Djoenggoe, Ardjoeno, 4,500 feet, 8 33, including the type: Tengger: Singolangoe, 5,000 feet, 233 and 19; Kletak, 6,000 feet, 13.